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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,426	09/28/2001	Akio Handa	0505-0869P	1515

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EXAMINER

BOEHLER, ANNE MARIE M

ART UNIT PAPER NUMBER

3611

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/964,426	Applicant(s) HANDA ET AL.	
	Examiner Anne Marie M. Boehler	Art Unit 3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of U.S. Patent No. 6,530,447 in view of Showalter.

The prior patent claims recite a switching device in a drive train of a four-wheel drive vehicle. The switching device includes a drive shaft with inner ring cam, a driven shaft with outer ring, and engaging/disengaging members between the inner and outer rings. An elastic member is connected between the inner ring and a retainer for the members biases the members into direction to connect the shafts. It also includes an electromagnetic clutch for setting the vehicle in a two or four-wheel drive mode. The claims are silent regarding the number of engaging/disengaging members.

Showalter shows a clutch with nine engagement/disengagement 150L, 150R sets. It also teaches that nine sets of equally spaced members between driving and

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driven shafts in a motor vehicle provides excellent operation and will ensure rapid engagement of three drive surfaces (see col. 7, lines 19-49).

It would have been obvious to use nine rather than eight members, as taught by Showalter, in order to provide improved operation of the clutch unit.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. in view of Showalter.

Itoh shows a switching device in a drive train of a four-wheel drive vehicle. The switching device includes a drive shaft 4 with inner ring cam 7, a driven shaft with outer ring 2 and engaging/disengaging members between the inner and outer rings. An elastic member (c-shaped spring in Figure 3) is connected between the inner ring 4, 7, and a retainer 8 for the members biases the members into direction to connect the shafts. When the vehicle is set in a two-wheel drive mode the members are moved to disconnect the shafts. Itoh also includes an electromagnetic clutch for setting the vehicle in a two or four-wheel drive mode.

Itoh shows eight engaging/disengaging members, rather than nine.

Showalter shows a clutch with nine engagement/disengagement 150L, 150R sets. It also teaches that nine sets of equally spaced members between driving and

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driven shafts in a motor vehicle provides excellent operation and will ensure rapid engagement of three drive surfaces (see col. 7, lines 19-49).

It would have been obvious to use nine rather than eight members, as taught by Showalter, in order to provide improved operation of the clutch unit.

5. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh et al. in view of Higby.

Itoh shows a switching device in a drive train of a four-wheel drive vehicle. The switching device includes a drive shaft 4 with inner ring cam 7, a driven shaft with outer ring 2 and engaging/disengaging members between the inner and outer rings. An elastic member (c-shaped spring in Figure 3) is connected between the inner ring 4, 7, and a retainer 8 for the members biases the members into direction to connect the shafts. When the vehicle is set in a two-wheel drive mode the members are moved to disconnect the shafts. Itoh also includes an electromagnetic clutch for setting the vehicle in a two or four-wheel drive mode.

Itoh shows eight engaging/disengaging members, rather than nine.

Higby shows a clutch with nine engagement/disengagement members (rollers 191) that engage nine flats 45, that are provided between input and output members.

It would have been obvious to use nine rather than eight members in the Itoh clutch, as taught by Higby, in order to provide improved operation of the clutch unit.

6. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamamura and Kato show clutches having three roller engaging/disengaging elements.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M Boehler whose telephone number is 703-308-0422. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

amb 6/4/04

Anne Marie M Boehler
Primary Examiner
Art Unit 3611

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